

REMARKS

Reconsideration and allowance of the above referenced application are respectfully requested.

Claims 3, 5-12, 14-23 35-44 stand rejected under 35 U.S.C. 102(e) as allegedly being anticipated by Yamazaki '621. This contention has been obviated by the rewritten claims which are provided herein.

The new claims define a semiconductor device with a crystalline semiconductor island that has silicon over a substrate. The crystalline semiconductor island has a source region, a drain region, and a channel formation region between the source and drain regions. A gate insulating film that has a first insulating film is over the crystalline semiconductor island. A second insulating film is over the first insulating film. A gate electrode is over the gate insulating film. The first insulating film has a side that is aligned with the side of the crystalline semiconductor island. New claim 46 defines that the gate insulating film comprises silicon oxide. New claim 47 defines that the first insulating film includes silicon oxide and the second insulating film comprises silicon nitride. New claim 48 defines that the first insulating film has silicon nitride and the second insulating film has silicon oxide. Claim 49 defines that both the first and second insulating film's comprise silicon nitride. These new claims are supported by the embodiment 1 and figures 1-2.

'621 discloses a silicon oxide film 33 having a thickness between 500 and 1500 angstroms. This film functions as a gate insulating film. '625 also defines a laser irradiation step as shown in figure 3 C. However, '621 does not disclose other

crucial claim features including the gate insulating film that is formed of a first insulating film over the crystalline semiconductor island and a second insulating film over the first insulating film, where the first insulating film has a side aligned with the side of the crystalline semiconductor island. Therefore, it is respectfully suggested that these features are not in anyway taught or suggested by the cited prior art and therefore that these rejected claims should be allowable.

Claims 2 and 31-34 stand rejected under 35 U.S.C. 103(a) as allegedly being obvious over Yamazaki '030 in view of Noguchi '951. This contention is again obviated by the claim amendments made herein. '030 discloses a silicon oxide film 153 that has a thickness between 50-2,000 angstroms been used as a gate insulating film on a silicon film, and a silicon nitride film 154 having the thickness between 50 and 200 angstroms on the silicon oxide film 153; see for example figure in 11 C. A laser irradiation step is used for activating the impurity ions; column 16 lines 43-55. '951 discloses laser irradiation for improving the crystallinity. Again, Yamazaki in view of Noguchi, however, do not disclose the salient limitations disclosed above, and specifically a gate insulating film with a first insulating film over the crystalline semiconductor island and a second insulating film over the first insulating film, where the first insulating film has a side that is aligned with the side of the crystalline semiconductor island. Since this is defined according to the new claims 45-64, it is respectfully suggested that these claims are completely patentable over the cited prior art.

Claims 24, 25, 27, 28 and 30-34 stand rejected under 35 USC 103(a) as allegedly being on patentable over Tsutsu '151. This contention has again been obviated. '151 discloses a gate

insulating film with a double layered structure. A second gate insulating film 11 which includes a silicon nitride layer is formed on a first gate insulating film that serves as a thermal oxide film. However, it is respectfully suggested that '151 does not disclose the above discussed limitations specifically a first insulating film over the crystalline semiconductor island and a second insulating film over the first insulating film, wherein the first insulating film has a side aligned with a side of this crystalline semiconductor island. Therefore, it is respectfully suggested that the rejection should be obviated.

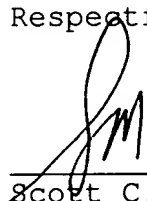
Claim 4 is rejected over '151 in view of Yamazaki '998. This contention is again obviated, since Yamazaki '998 discloses an LDD structure with a gate insulating film that is aligned with the gate electrode. However, it does not teach or suggest the specific limitations described above with a gate insulating film that has a first insulating film over the crystalline semiconductor island and a second insulating film over the first insulating film where the first insulating film has a side that is aligned with a side of the crystalline semiconductor island. For these reasons, it is respectfully suggested that all of the claims should be in condition for allowance. A formal notice to that effect is respectfully solicited.

Applicant submits concurrently herewith an Information Disclosure Statement ("IDS"). Enclosed is a \$290.00 check for the IDS and the Petition for Extension of Time fee. Please apply any other charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date: \_\_\_\_\_

6/14/02

  
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